DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-018946 Address: 333 Burma Road **Date Inspected:** 01-Dec-2010

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes Xu Le Feng No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No Yes No N/A **Delayed / Cancelled:**

Bridge No: 34-0006 **Component: TOWER & OBG Components**

Summary of Items Observed:

On this date Caltrans Office of Structural Materials Quality Assurance Inspector, Sandeep Kumar (QA) was present during the times noted above for observations relative to the work being performed.

BAY#10

The following Non Destructive Testing (NDT) inspection carried out as per the ZPMC submitted Notification No. 007577

Magnetic Particle Testing (MT)

This QA inspector performed MT of the area previously tested and accepted by ZPMC Quality Control personnel.

This QA Inspector generated an MT report for this date. The member is identified as TOWER Component. The weld designation reviewed as follows:

TOWER FACADE – LIFT-4

SD1-SFSA4-323A/B-13~32

SD1-SFSA4-329A/B-13~32

The following Non Destructive Testing (NDT) inspection carried out as per the ZPMC submitted Notification No. 007582

Magnetic Particle Testing (MT)

This QA inspector performed MT of the area previously tested and accepted by ZPMC Quality Control personnel.

This QA Inspector generated an MT report for this date. The member is identified as TOWER Component. The

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weld designation reviewed as follows:

TOWER FAÇADE – LIFT-4 SD1-SFSA4-323A/B-3~12

This QA Inspector observed the following work in progress

Shielded Metal Arc Welding (SMAW):

Weld joint # 14 located on Tower Façade plate pad eye SD1 – SFSA4 – 71. Welder is identified as 040581. ZPMC Quality Control (QC) Inspector is identified as Jiang Xiao Bo. The welding variables recorded by QC appeared to comply with the WPS -B - P - 2112.

Weld joint # 03 located on Tower Façade plate pad eye SD1 – SFSA4 – 94. Welder is identified as 040581. ZPMC Quality Control (QC) Inspector is identified as Jiang Xiao Bo. The welding variables recorded by QC appeared to comply with the WPS -B - P - 2112.

Fluxcored Arc Welding (FCAW):

Weld joint # 12 located on Lift-6 tower head component SSD1 – FCSA6 – 1. Welder is identified as 040302. ZPMC Quality Control (QC) Inspector is identified as Li Peng Fei. The welding variables recorded by QC appeared to comply with the WPS -B - T - 2132. (See the attached photo)

Weld joint # 07 located on Lift-6 tower head component SSD1 – FCSA6 – 1. Welder is identified as 040367. ZPMC Quality Control (QC) Inspector is identified as Li Peng Fei. The welding variables recorded by QC appeared to comply with the WPS -B - T - 2132.

Weld joint # 08 located on Lift-6 tower head component SSD1 – FCSA6 – 1. Welder is identified as 040458. ZPMC Quality Control (QC) Inspector is identified as Li Peng Fei. The welding variables recorded by QC appeared to comply with the WPS -B - T - 2132.

BAY#11

The following Non Destructive Testing (NDT) inspection carried out as per the ZPMC submitted Notification No. 007566

Visual Inspection Testing (VT)

This QA inspector performed VT of the area previously tested and accepted by ZPMC Quality Control personnel. The member is identified as TOWER Component. The identified component designations reviewed are as follows:

TOWER LIFT-5 WSD1 - TL5 - 4B/F - 7, 36, 4ESD1 - TL5 - 2B/F - 23

Magnetic Particle Testing (MT)

This QA inspector performed MT of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The member is identified as TOWER Component. The weld designation reviewed as follows:

TOWER LIFT-5

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WSD1 - TL5 - 4B/F - 7, 36, 4ESD1 - TL5 - 2B/F - 23

This QA Inspector observed the following work in progress

Shielded Metal Arc Welding (SMAW):

Weld joint # 20A located on Lift-6 Tower Head component WSD1 – TPSA6 – 3. Welder is identified as 040723. ZPMC Quality Control (QC) Inspector is identified as Li Bin. The welding variables recorded by QC appeared to comply with the WPS -B - T - 2231 - B - U2 - F.

Weld joint # 19A located on Lift-6 Tower Head component ESD1 – TPSA6 – 2. Welder is identified as 040723. ZPMC Quality Control (QC) Inspector is identified as Li Bin. The welding variables recorded by QC appeared to comply with the WPS -B - T - 2231 - B - U2 - F.

ORTHOTROPIC BOX GIRDER (OBG) AT BAY#11

This QA Inspector observed the following work in progress

Shielded Metal Arc Welding (SMAW):

Weld joint #15 located on Bike Path BK004A2 – 022. Welder is identified as 037840. ZPMC Quality Control (QC) Inspector is identified as Wang Chuang Xin. The welding variables recorded by QC appeared to comply with the WPS -B - P - 2112 - Plug. (See attached photo)

Fluxcored Arc Welding (FCAW):

Weld joint # 02 located on Bike Path BK004A8 – 034. Welder is identified as 205649. ZPMC Quality Control (QC) Inspector is identified as Wang Chuang Xin. The welding variables recorded by QC appeared to comply with the WPS -B - T - 2332 - Tc - P4 - F.

Weld joint # 07 located on Bike Path BK004A6 – 034. Welder is identified as 040736. ZPMC Quality Control (QC) Inspector is identified as Wang Chuang Xin. The welding variables recorded by QC appeared to comply with the WPS -B - T - 2332 - Tc - P4 - F.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.





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Summary of Conversations:

No Relevant Conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Thomas Ho- 15002048250, who represents the Office of Structural Materials for your project.

| Inspected By: | Kumar,Sandeep | Quality Assurance Inspector |
|---------------|------------------|-----------------------------|
| Reviewed By: | Clifford,William | QA Reviewer |